

**CLAIMS**

What is claimed is:

5           1.     A method of managing ammunition for military unit training events, said method comprising the step of:

          computerizing the allocation and logistics for ammunition requirements of the military unit training events.

10           2.     The method of claim 1, further comprising the step of:

          receiving forecasts of the training events.

          3.     The method of claim 2, further comprising the step  
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          determining the ammunition requirements for the training events.

          4.     The method of claim 3, further comprising the step  
20 of:

          allocating the ammunition for the training events.

5. The method of claim 3, further comprising the step of:

comparing the ammunition requirements with available ammunition inventories.

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6. The method of claim 3, further comprising the step of:

adjusting the ammunition allocations to reflect the ammunition requirements and the ammunition inventories.

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7. The method of claim 6, further comprising the step of:

requesting ammunition from supplier organizations for the training events.

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8. The method of claim 7, further comprising the step of:

approving the ammunition allocations.

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9. The method of claim 8, further comprising the step of:

including ammunition supplies from the supplier organizations into the ammunition inventories.

10. The method of claim 9, further comprising the step  
of:

distributing the approved ammunition allocations to user  
5 level units.

11. The method of claim 10, further comprising the step  
of:

making an accounting for physical distribution of the  
10 ammunition and its associated packaging material.

12. The method of claim 11, further comprising the step  
of:

returning residue from the ammunition and the packaging  
15 material for recycling.

13. A method of managing ammunition for military unit  
training events, for storage on at least one computer storage  
medium, said method comprising the steps of:

20 a. computerizing the allocation and logistics for  
ammunition requirements of the military unit training events;  
and

b. determining the type of training requested by a training unit in the military unit training event.

14. The method of computerized management of ammunition  
5 for military unit training events of claim 13, further comprising the step of:

receiving forecasts of the training events for an identified time frame from user level units.

10 15. The method of computerized management of ammunition for military unit training events of claim 14, further comprising the step of:

determining the ammunition requirements for the training events by comparison with data in a database.

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16. The method of computerized management of ammunition for military unit training events of claim 15, further comprising the step of:

comparing the ammunition requirements with ammunition  
20 inventories on hand.

17. The method of computerized management of ammunition for military unit training events of claim 16, further comprising the step of:

adjusting ammunition allocations to reflect the  
5 ammunition requirements and the ammunition inventories.

18. The method of computerized management of ammunition for military unit training events of claim 17, further comprising the step of:

10 allocating the ammunition for the training events occurring within the identified time frame.

19. The method of computerized management of ammunition for military unit training events of claim 18, further  
15 comprising the step of:

requesting the ammunition from supplier organizations for the training events occurring within the identified time frame, wherein a parent organization consolidates customer requests for ammunition allocation and forwards the customer  
20 requests for ammunition allocation for approval.

20. The method of computerized management of ammunition for military unit training events of claim 19, further comprising the step of approving the ammunition allocations.

5 21. The method of computerized management of ammunition for military unit training events of claim 20, further comprising the step of including ammunition supplies from supplier organizations into the ammunition inventories.

10 22. The method of computerized management of ammunition for military unit training events of claim 21, further comprising the step of distributing the approved ammunition allocations to the user level units, wherein an accounting is made for physical distribution of the ammunition and packaging  
15 material, including return of residue after conclusion of the training events.

23. The method of computerized management of ammunition for military unit training events of claim 22, further  
20 comprising the step of identifying all authorized substitutes for a given ammunition product.

24. The method of computerized management of ammunition for military unit training events of claim 23, further comprising the step of identifying all weapon equipment that can use a given ammunition product.

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25. The method of computerized management of ammunition for military unit training events of claim 24, further comprising the step of identifying all ammunition products usable by a given weapon.

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26. The method of computerized management of ammunition for military unit training events of claim 25, further comprising the step of identifying all residue requirements for recovery and disposal for a given ammunition product.

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27. The method of computerized management of ammunition for military unit training events of claim 26, further comprising the step of determining the number and types of vehicles required to transport the ammunition requirements.

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28. The method of computerized management of ammunition for military unit training events of claim 27, further

comprising the step of identifying hazard class and compatibility codes for the vehicles.

29. The method of computerized management of ammunition  
5 for military unit training events of claim 28, further comprising the step of matching the vehicles by hazard class and compatibility code with ammunition to be transported.

30. The method of computerized management of ammunition  
10 for military unit training events of claim 29, wherein forecasts of ammunition requirements are determined from the training plan documents of user level units.

31. The method of computerized management of ammunition  
15 for military unit training events of claim 30, wherein user level units have access to input forecasts and receive allocations.

32. The method of computerized management of ammunition  
20 for military unit training events of claim 31, said method further comprising the step of utilizing a plurality of tables of ammunition requirements for training events within a database, a plurality of table names, a plurality of fields



within each of said plurality of tables, a plurality of forms  
for input of data, at least one computer-readable storage  
medium, at least one software program and a computer means for  
operating on said database by operation of said at least one  
5 software program.

33. A system for ammunition management comprising:  
computer means operating on a database of training events  
and ammunition requirements thereof.

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34. The system of claim 33, further comprising:  
means for input of quantified requests for ammunition for  
training events from user level units.

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35. The system of claim 34, further comprising:  
at least one software program for controlling said  
computer means to operate on said database in concert with  
said quantified requests.

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36. The system of claim 35, further comprising:  
comparison means for matching inventory of ammunition  
with said quantified requests.

37. The system of claim 36, further comprising:  
allocation means for adjusting ammunition stocks to  
priority rank of training events.

5 38. The system of claim 37, further comprising:  
output means for providing approval requests and reports.

39. The system of claim 38, further comprising:  
distribution means for distributing ammunition to user  
10 level units.

40. The system of claim 39, wherein said at least one  
software program utilizes structured query language  
instructions.  
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41. The system of claim 40, wherein said at least one  
software program utilizes forms with embedded computer  
software code therein.

20 42. At least one computer-readable tangible medium  
having instructions stored thereon for implementing a method  
of ammunition management, said instructions including the  
functions of:

a. receiving forecasts of training events from user level units; and

b. utilizing the computer to process said forecasts of the training events into ammunition requirements.

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43. The instructions on said tangible medium of claim 42 further comprising the functions of:

utilizing the computer to consolidate forecasts for a plurality of user level units.

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44. The instructions on said tangible medium of claim 43 further comprising the functions of:

utilizing the computer to determine the total ammunition requirements for all user level units;

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45. The instructions on said tangible medium of claim 44 further comprising the functions of:

utilizing the computer to compare the total ammunition requirements with ammunition stock on hand.

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46. The instructions on said tangible medium of claim 45 further comprising the functions of:

allocating approved ammunition to user level units.

47. The instructions on said tangible medium of claim 46, wherein said instructions further include the function of distributing allocated ammunition to user level units.

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48. The instructions on said tangible medium of claim 47, wherein said instructions further include the function of recovering unused ammunition stocks and other residue from user level units.

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49. The instructions on said tangible medium of claim 48, wherein said instructions further include the function of requesting approval for use of ammunition to meet requests.

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50. A computer readable tangible medium storing instructions for implementing a method of ammunition management, wherein the contents of said medium cause a computer system to operate on a database and external information, by performing the steps of:

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- a. receiving forecasts of training events;
- b. calculating ammunition requirements of the training events;

c. comparing ammunition requirements to existing ammunition stocks;

d. allocating ammunition to user level units based on ammunition stocks, forecast and priority of training events;

5 e. distributing allocated ammunition to user level units; and

f. recovering spent ammunition and packaging from user level units.

10 51. A computer device comprising:

means for determining the allocation and logistics of ammunition based upon training events.

15 52. The computer device of claim 51, further comprising:  
means for receiving training event forecasts.

53. The computer device of claim 52, further comprising:  
means for determining ammunition requirements to meet the training event forecasts.

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54. The computer device of claim 53, further comprising:  
means for comparing the ammunition requirements to ammunition stocks on hand.

55. The computer device of claim 54, further comprising:  
means for obtaining authorization to utilize stocks of  
ammunition to meet the ammunition requirements.

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56. The computer device of claim 55, further comprising:  
means for requesting additional stocks of ammunition to  
meet the ammunition requirements, if needed.

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57. The computer device of claim 56, further comprising:  
means for allocating the ammunition requirements to user  
level units.

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58. The computer device of claim 57, further comprising:  
means for distributing the ammunition requirements to  
user level units.

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59. The computer device of claim 58, further comprising:  
means for recovering spent ammunition and packaging  
thereof after end of the training events.

60. An apparatus for managing ammunition requirements and supply for weapon training events, said apparatus comprising:

a database of ammunition requirements, said database  
5 accessible via a network.

61. The apparatus of claim 60, further comprising:

training forecasts supplied by user level units for  
defining the ammunition requirements therefor.

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62. The apparatus of claim 61, further comprising:

a software program, said software program comprising  
program operations selected from the group consisting of means  
for obtaining ammunition requirements of weapon training  
15 events from said database, means for calculating total  
ammunition requirements by operation on said database, means  
for comparing the total ammunition requirements for the  
training forecasts with ammunition inventories on hand, means  
for transforming said forecasts into allocations of ammunition  
20 inventories, and combinations thereof.

63. The apparatus of claim 62, further comprising:

means for distributing ammunition to the user level units.

64. A method for management of ammunition for military units, for storage on at least one computer storage medium, comprising the steps of:

a. receiving forecasts of ammunition requirements for a period of time from user level units;

b. comparing ammunition requirements with ammunition inventories on hand;

c. adjusting ammunition allocations to reflect ammunition requirements and ammunition inventories;

d. allocating ammunition to the user level units within the period of time;

e. requesting ammunition from supplier organizations for ammunition requirements for the period of time, wherein a parent organization consolidates customer requests and forwards the customer requests for approval;

f. including ammunition supplies from supplier organizations into inventory; and

g. distributing approved ammunition allocations to user level units, wherein an accounting is made for physical distribution of ammunition.



65. A system for ammunition management comprising:  
a software driven computer means for input of quantified requests for ammunition from user level units.

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66. The system for ammunition management of claim 65 further comprising:

means for comparing inventory of ammunition with said quantified requests.

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67. The system for ammunition management of claim 66 further comprising:

means for allocating and adjusting ammunition stocks to user level units.

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68. The system for ammunition management of claim 67 further comprising:

means for providing approval requests and reports.

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69. The system for ammunition management of claim 68 further comprising:

means for distributing ammunition to user level units.

70. An apparatus for managing ammunition requirements and supply, comprising:

a. a computer;

b. a network, in communication with an external  
5 communications link;

c. ammunition requirements forecasts supplied by user level units;

d. software program comprising means for calculating total ammunition requirements for all user level units, means  
10 for comparing the total ammunition requirements with ammunition inventories on hand, and means for transforming the ammunition requirements and ammunition inventories into allocations of ammunition to the user level units; and

e. means for distributing ammunition to the user level  
15 units.

71. The apparatus for managing ammunition requirements and supply of claim 70, further comprising scanning means for inventory control.

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72. The apparatus for managing ammunition requirements and supply of claim 71, further comprising ammunition contained in packages having a bar code label thereon.

73. The apparatus for managing ammunition requirements and supply of claim 72, further comprising storage magazines having bar code labels thereon.

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74. An apparatus comprising at least one computer and at least one computer-readable tangible medium means for storing instructions for implementing a method of ammunition management, said instructions including the function of:

10       utilizing said at least one computer to consolidate forecasts for a plurality of user level units.

75. The instructions stored on the apparatus of claim 74, wherein said instructions further comprise the function  
15 of:

      utilizing said computer to determine the total ammunition requirements for all user level units.

76. The instructions stored on the apparatus of claim  
20 75, wherein said instructions further comprise the function of:

      utilizing said computer to compare the total ammunition requirements with ammunition stock on hand.

77. The instructions stored on the apparatus of claim 76, wherein said instructions further comprise the function of:

5        requesting approval for use of ammunition to meet requests.

78. The instructions stored on the apparatus of claim 77, wherein said instructions further comprise the function  
10 of:

allocating approved ammunition to user level units.

79. The instructions stored on the apparatus of claim 78, wherein said instructions further comprise the function  
15 of:

distributing allocated ammunition to user level units.